| IPC ASSOCIATION ELECTRONIC         | © Copyright 2005. II                   | Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions. |                                  |                 |                         | This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility. |                              |                           |                    |          |               |                                 |              |     |           |      |
|------------------------------------|--|---|----------------------------------|-----------------|-------------------------|---|------------------------------|---------------------------|--------------------|----------|---------------|---------------------------------|--------------|-----|-----------|------|
| 1752-21.1                          |  |   |                                  |                 | Form Type<br>Distribute |   |                              |                           |                    |          | neous Materia | ials and Mfg Information        |              |     |           |      |
| Supplier                           | Information                            |   |                                  |                 |                         |   |                              |                           |                    |          |               |                                 |              |     |           |      |
| Company name* Company              |  |   |                                  | any unique ID   |                         |   | Unique ID Authority          |                           |                    |          |               | Response Date*                  |              |     |           |      |
| onsemi                             |  |   |                                  |                 |                         |   |                              |                           |                    |          | 2023-06-08    |                                 |              |     |           |      |
| Contact N                          | ame                                    |   | Title - Contact                  |                 |                         | ]   | Phone - Contact*             |                           |                    |          |               | Email - Contact*                |              |     |           |      |
| Product-I                          | Env-Stewards                           |   | Product Enviro Compliance        |                 |                         |   | NA                           |                           |                    |          |               | Product-Env-Stewards@onsemi.com |              |     |           |      |
| Authorize                          | d Representative*                      |   | Title - Representative           |                 |                         | 1   | Phone - Representative*      |                           |                    |          |               | Email - Representative*         |              |     |           |      |
| Product-Env-Stewards               |  |   | Product Enviro Compliance        |                 |                         |   | NA                           |                           |                    |          |               | Product-Env-Stewards@onsemi.com |              |     |           |      |
|                                    | Requester Item Number Mfr Item         |   | Number Mfr Item Name             |                 |                         |   | Effective Date   Version   M |                           | Manufacturing Site |          | ,             | Weight*                         | Ţ            | JOM | Unit Type |      |
|                                    |  | NLVHC1G04DFT1G Single Inverte   |                                  | Single Inverter |                         | 2023-06-0   |                              |                           |                    | CN1      |               | •                               | 6.2          | n   | ng        | Each |
| Manufa                             | cturing Proccess Informat              | ion   |                                  |                 |                         |   | ,                            |                           |                    |          |               |                                 |              |     |           | •    |
|                                    | Terminal Plating / Grid Array Material |   | Terminal Base Alloy J-STD-020 MS |                 | L Rating                | Peak Process Body Tempera   |                              | ture Max Time at Peak Tem |                    | Temperat | ure Nu        | ımber of I                      | Reflow Cycle | es  |           |      |
| Matte Tin (Sn) - annealed CU Alloy |  |   | 1                                | 1               |                         |   | <b>260</b> C                 |                           | 30                 |          | seconds 3     |                                 |              |     |           |      |
| Comments                           |  |   |                                  |                 |                         |   |                              |                           |                    |          |               |                                 |              |     |           |      |
| evel 1 - m                         | aximum time at peak temperatu          | re during sol   | dering is 10-3                   | 0 seconds       |                         |   |                              |                           |                    |          |               |                                 |              |     |           |      |
| or more                            | information regarding material         | composition   | please refer to                  | page 3          |                         |   |                              |                           |                    |          |               |                                 |              |     |           |      |

| RoHS Material Composition Declaration   |  |  | Declaration Type *   | Detail   | led   |  |  |  |  |
|---|--|--|--|--|---|--|--|--|--|
| Directive 2015/863/EU amending RoHS<br>Directive 2011/65/EU   |  | nium (Cr6+), Polybrominated Biphenyls (Pl  | aterial for Cadmium and quantity limit of 0.1% by BB), Polybrominated Diphenyl Ethers (PBDE), an   |  |   |  |  |  |  |
| cadmium, hexavalentchromium, polybromir<br>contains a RoHS restricted substance inexce<br>encompass all such components. Supplier ce<br>as of the date that Supplier completes this fo<br>Company acknowledges that Supplier may l<br>independently verified information provided<br>certification in this paragraph. If the Compan | nated biphenyls and/or polybrominated dipless of an applicable quantity limit, please intifies that it gathered the information it prome. Supplier acknowledges that Company have relied on information provided by other by others, Supplier agrees that, at a mining and the Supplier enter into a written agree esource of the Supplier's liability and the | henyl ethers (each a "RoHS restricted substational substance below which, if any, RoHS exemption by desired in this form using appropriate method will rely on this certification in determining ters in completing this form, and that Supplies have provided certification between the will respect to the identified part, the Company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects the company is the co | ws of the European Union member states) of the pnce") in excess of the applicable quantity limit iden you believe may apply. If the part is an assemble is to ensure its accuracy and that such information the compliance of its products with European Union may not have independently verified such informs regarding their contributions to the part, and tho terms and conditions of that agreement, including the provides in this formation information the Supplier provides in this formation. | entified above. If a<br>y with lower level<br>is true and correct<br>on member state la<br>nation. However, in<br>se certifications are<br>any warranty rigl | n homogeneous material within the part<br>components, the declaration shall<br>t to the best of its knowledge and belief,<br>aws that implement the RoHS Directive.<br>In situations where Supplier has not<br>the at least as comprehensive as the<br>this and/or remedies provided as part of |  |  |  |  |
| RoHS Declaration * 1 - Item   | (s) does not contain RoHS restricted substa  | ances per the definition above   | Supplier Ac  | cceptance *  | Accepted  |  |  |  |  |
| Exemption: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.   |  |  |  |  |   |  |  |  |  |
| Exemption List Version  | EL-2011/534/EU   |  |  |  |   |  |  |  |  |
| Declaration Signature   |  |  |  |  |   |  |  |  |  |
| Instructional Complete all of the required  | fields on all neggs of this form. Calcut th  |  | a duan dawn. This will display the signature on  | a Digitally sign   | the declaration (if recurined by the  |  |  |  |  |
| Instructions: Complete all of the required Requester) and click on Submit Form to   |  |  | e drop-down. This will display the signature ar  | ea. Digitally sign   | the declaration (if required by the   |  |  |  |  |

## **Homogeneous Material Composition Declaration for Electronic Products**

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

| Homogeneous Material Weight |      | Unit of Measure | Level Substance |                              | CAS        | Exempt | Weight | Unit of Measure |  |
|-----------------------------|------|-----------------|-----------------|------------------------------|------------|--------|--------|-----------------|--|
| Die                         | 0.19 | mg              | Supplier        | Silicon (Si)                 | 7440-21-3  |        | 0.19   | mg              |  |
| Lead Frame                  | 2.04 | mg              | В               | Nickel (Ni)                  | 7440-02-0  |        | 0.7813 | mg              |  |
|                             |      |                 | Supplier        | Iron (Fe)                    | 7439-89-6  |        | 1.0792 | mg              |  |
|                             |      |                 | Supplier        | Copper (Cu)                  | 7440-50-8  |        | 0.1795 | mg              |  |
| Mold Compound-Black         | 3.9  | mg              | Supplier        | Ortho Cresol Novolac Resin   | 29690-82-2 |        | 0.39   | mg              |  |
|                             |      |                 | Supplier        | Carbon Black (C)             | 1333-86-4  |        | 0.0195 | mg              |  |
|                             |      |                 | Supplier        | Aluminum Hydroxide (Al(OH)3) | 21645-51-2 |        | 0.5655 | mg              |  |
|                             |      |                 | Supplier        | Fused Silica (SiO2)          | 60676-86-0 |        | 2.535  | mg              |  |
|                             |      |                 | Supplier        | Phenolic Resin (Novolac)     | 9003-35-4  |        | 0.39   | mg              |  |
| Plating                     | 0.05 | mg              | Supplier        | Tin (Sn)                     | 7440-31-5  |        | 0.05   | mg              |  |
| Wire Bond - Au              | 0.02 | mg              | Supplier        | Gold (Au)                    | 7440-57-5  |        | 0.02   | mg              |  |